

401 KAR 47:180. Contents of the administrative application for solid waste landfills.

RELATES TO: KRS 224.01, 224.10, 224.40, 224.44, 224.99, 50 C.F.R. Part 424

STATUTORY AUTHORITY: KRS 224.10-100, 224.40-305

NECESSITY, FUNCTION, AND CONFORMITY: KRS Chapter 224 requires the cabinet to adopt rules and administrative regulations for the management, processing or disposal of wastes. KRS 224.40-305 requires that persons engaging in the management, processing or disposal of waste obtain a permit. This chapter establishes the permitting standards for solid waste sites or facilities, the standards applicable to all solid waste sites or facilities, and the standards for certification of operators. An overview of the permit program is found in Section 1 of 401 KAR 47:080. This administrative regulation sets forth the general contents of the administrative application for solid waste landfills excluding landfarming.

Section 1. Objective and General Requirements. The objectives of the administrative application for solid waste facilities are to allow the cabinet to determine if the proposed permit is consistent with local solid waste management area requirements and to review potential effects on human health and the environment if the proposed landfill is permitted. The information required for an administrative application for solid waste management facilities includes, but shall not be limited to, ownership documents, documentation of past performance, results from the geotechnical investigation specified in the approved notice of intent to apply for a solid waste permit, and the proposed design plan. The information provided shall be sufficient to allow the cabinet to evaluate the data detailing the site characteristics and the proposed design in the administrative application compared with the requirements for each type of site or facility, the waste to be disposed, and the ability to meet environmental performance standards. Information required in the administrative application shall be submitted to the cabinet in a format approved by the cabinet and signed in accordance with requirements in Section 6 of 401 KAR 47:160. Design drawings, specifications, and engineering studies shall be sealed by a professional engineer registered in Kentucky. The contents of the administrative application contain information that is part of a complete application as required by KRS 224.40-310. The contents of the administrative application shall be accurate and complete at the time the cabinet makes its preliminary determination to issue a solid waste permit.

Section 2. Notice of Intent to Apply. The owner or operator shall state the name of the applicant and list the date of submittal of the notice of intent to apply for a solid waste permit as required by 401 KAR 47:170.

Section 3. Compliance with the Area Plan. (1) The applicant shall describe how the proposed new solid waste site or facility or expansion to the existing solid waste site or facility complies with or relates to relevant solid waste management area plan. If the proposed site or expansion is in an area with an approved area plan, the cabinet shall review the application for compliance with the solid waste management area plan. If the proposed facility does not comply with the approved area plan, the cabinet may deny the permit application unless a revision or amendment to the plans are completed by the solid waste management areas and approved by the cabinet.

(2) **Modification of facilities.** When an application for a modification to a solid waste site or facility is for an increase in the quantity of waste, the cabinet may deny the application when the additional quantity shall reduce the projected operating life to less than five (5) years. If an application for a modification to a solid waste site or facility reduces the projected operating life of the site or facility to less than five (5) years, the cabinet shall notify the affected solid waste management areas.

Section 4. General Information Requirements. (1) The applicant is to describe the potential im-

part of operating the facility on the following:

- (a) Transportation facilities;
- (b) Prime agricultural lands; and
- (c) Water resources.

(2) Historic properties. The application shall include a review of the site features or structures of historical significance.

(3) Endangered or threatened species. The application shall include an inventory of any federally listed endangered or threatened species and the habitat critical to any endangered or threatened species consistent with the requirements of 50 CFR Part 424 as of October 1984.

(4) Variances. The applicant shall describe any anticipated variance requests pursuant to Section 2 of 401 KAR 30:020, including the administrative regulation from which relief is sought. The variance request shall describe the ability of the applicant to meet the environmental performance standards of 401 KAR 47:030 if the variance is granted.

(5) The applicant shall provide a statement that the facility complies with any local planning and zoning laws.

(6) The applicant shall provide a statement that the proposed facility does not conflict with the solid waste management area plan(s) or requirements of the district or county.

(7) The applicant shall provide a copy of the deed to the property and a copy of the lease or proposed lease showing a thirty (30) year right of reentry following closure of the facility if the landowner is not the applicant. The proposed lease or option shall be executed prior to permit issuance. The applicant shall also provide the names of the owners of mineral rights beneath the property.

(8) The applicant shall provide a statement that describes what assistance the local fire district shall provide.

Section 5. Topographic Map and Site Information. The administrative application shall contain:

(1) An existing conditions topographic map at a suitable scale to depict the anticipated buffer zones and limits of waste on an engineering drawing twenty-four (24) inches by thirty-six (36) inches. The contour intervals on the map shall be two (2) feet. The map shall clearly show the following:

- (a) Legend with a bar scale, date of preparation, and last update;
- (b) Orientation of the map (north arrow);
- (c) 100 year flood plain area and, if applicable, floodway;
- (d) Surface waters, including ephemeral, intermittent and perennial streams;
- (e) Surrounding land uses (residential, commercial, agricultural, recreational, etc.). For areas with zoning, the land use map shall conform to the local zoning agency's land use mapping system;
- (f) A wind rose (i.e., prevailing wind-speed and direction);
- (g) Property lines;
- (h) The location of areas which are proposed to be excavated to obtain earthen material for the construction of the facility and for cover material;
- (i) The zones that reflect the area of expected subsidence or critical draw if subsurface mines, caves or excavations subside;
- (j) Proposed limits of the waste;
- (k) The actual elevation referenced to a United States Geological Survey mean sea level datum and location of test borings and core samplings;
- (l) Injection and withdrawal wells;
- (m) Any existing structures; and
- (n) Alternate map and drawing scales may be approved by the cabinet.

(2) Site information. The applicant shall provide the following information regarding the potential site:

- (a) Total acres of site;

- (b) Acres of the site to be designed for disposal areas;
- (c) Approximate waste volume based on a minimum of four (4) equally spaced cross-sections;
- (d) Planned life of facility;
- (e) A description of title, deed, or usage restrictions affecting the proposed permit area including a scaled drawing showing the current boundaries of all property proposed for development and buffer zones, and the ownership of these properties and all adjacent property; and
- (f) The presence of any abandoned, reclaimed, active or inactive surface or subsurface mines or natural caves on the site.

Section 6. Geologic and Hydrogeologic Information. (1) The administrative application shall include the following geologic information:

- (a) A description of the type, texture, thickness and range in thickness of unconsolidated materials;
- (b) A description of the regional bedrock geologic structure to include the regional stratigraphic strike and dip, the locations and attitudes of regional faults and folds and regional jointing trends;
- (c) A description of the site specific geologic structure to include site specific stratigraphic strike and dip, the locations and attitudes of any faults or folds intersecting the site and the attitudes and spacing of joints;
- (d) A brief description of the influence that fracture zones have on the movement of infiltrated water and groundwater;
- (e) A minimum of two (2) geologic cross sections, using published data, bedrock outcrops and rock core boring information which shall be depicted on scaled drawings with vertical exaggeration, to adequately illustrate the geology of the site. The cross sections shall include:
 1. The seasonal high groundwater table; and
 2. Rock outcrop occurrences.
- (f) A list of any extractable coal seams or other minerals beneath the site;
- (g) A description of any active or inactive deep mines located beneath the site or within 1,500 feet of the site including depth to mined area, aerial extent of mined area and type of minerals mined (if coal, give the names of seams); and
- (h) A map depicting the property, the proposed limits of waste and the area at least 1,500 feet from the limits of waste at a scale of one (1) inch equals 400 feet that shows the following:
 1. Geologic units and rock outcrop occurrences;
 2. Surface depressions, sinkholes and spring occurrences;
 3. Location of wells used for water withdrawal and injection of fluids;
 4. Location of rock core borings; and
 5. Surface contours.

(2) The administrative application shall include the following hydrogeologic characterization:

- (a) The hydrologic characteristics of the uppermost aquifer and the geologic units hydraulically connected to it, including field test data for hydraulic conductivity, storage coefficient and transmissivity, and groundwater hydraulic gradient and velocity. The description of these characteristics shall be based on multiple well aquifer tests, piezometer nest evaluation, core evaluation and other appropriate methods approved by the cabinet. In karst environments both diffuse and discrete flow conditions shall be characterized. The water quality characterization as specified in Section 11 of 401 KAR 48:300 shall be included. The application shall include data and the procedures and calculations used to determine these characteristics;
- (b) Tracer studies. Where sites overlie fractured bedrock, weathered limestone or dolomite bedrock or where karst environments cannot be avoided, the cabinet may require tracer studies before finalizing the groundwater monitoring plan; and
- (c) A survey and listing of residential springs and water wells within one (1) mile of the proposed

waste boundaries. The survey shall determine the location of springs and wells which shall be shown on a map with their approximate elevation and depth, name of owner, age and usage of the spring or well, stratigraphic unit that the spring is located in or is constructed in, well construction, static well levels, spring or well yield, perceived water quality, and any other relevant data which can be obtained.

Section 7. Soils Information. The administrative application for a solid waste landfill shall contain a soils inventory consisting of a description of the total volume and source of borrow material available, and total estimated volume and source of required daily cover, interim cover, long term cover, final cover, and low permeability soils required by 401 KAR 48:060, 401 KAR 48:070, 401 KAR 48:080, 401 KAR 48:090, and 401 KAR 48:170. The administrative application shall include the following soils data as determined by the approved site investigation: location, depth, thickness, classification of soils for engineering purposes, particle size distribution, atterburg limits, optimum moisture, permeability, and recoverable volume in compacted cubic yards for each soil classification and permeability. The administrative application shall include a map at a scale of one (1) inch equals 400 feet depicting the distribution of the soils that is keyed to a list of the soils by engineering classification. The approximate volume and depth of each type of soil shall be recorded on the map.

Section 8. Siting Restrictions and Design Report for Landfills. The administrative application for landfills shall contain a report describing the design the applicant proposes for the facility to meet the siting, design and operating requirement restrictions in 401 KAR 47:030, 401 KAR 48:050, 401 KAR 48:060, 401 KAR 48:070, 401 KAR 48:080, 401 KAR 48:090 401 KAR 48:170 and be consistent with Section 4 of this administrative regulation. The report shall include a description of the engineering drawings to be developed by type and the proposed scale for each. The report shall include the proposed points of compliance as required in accordance with 401 KAR 48:300, Section 3. The design report shall address the proposed liner and cap design.

Section 9. Executive Summary. The administrative application shall include an executive summary pursuant to KRS 224.40-310.

(1) The written portion of the executive summary shall be in a format that may be understood by the average citizen and shall contain:

- (a) The applicant's name and address;
- (b) Directions to the site;
- (c) Zoning requirements;
- (d) Purpose of the application;
- (e) Type of landfill, i.e., construction/demolition debris, residual, or contained;
- (f) Acreage of the property and the area to be filled;
- (g) Volume of fill stated in cubic yards;
- (h) Source of waste by county or facility as appropriate, both in-state and out-of-state;
- (i) A description of all waste, other than residential, to be disposed at the site;
- (j) Anticipated operating life of the proposed landfill site reported in years;
- (k) A description and the source of soils to be used for liner, cover material, and other purposes;
- (l) General geology, i.e., limestone, coal field, etc., of the proposed site area;
- (m) A description of the groundwater resources (aquifers and flow patterns);
- (n) Approximate depth to groundwater and general groundwater use in the area;
- (o) A description of surface water control measures;
- (p) A description of the liner and cap;
- (q) Leachate management methodology to include treatment and or disposal; and
- (r) Any other information considered to be pertinent to the public interest or of concern to the solid

waste management planning area, the applicant, or the cabinet.

(2) An area map, twenty-four (24) inches by thirty-six (36) inches, shall be provided depicting the proposed development plan. The map shall be prepared to include the facility plus 1,500 feet from the boundary of the proposed waste cells. The map shall show the following:

- (a) Major highways and features;
 - (b) Site boundaries and waste limits;
 - (c) Adjacent land use and zoning;
 - (d) Any water supply intake shall be either shown or noted;
 - (e) Federally listed endangered and threatened species or candidate species and their habitat as identified by the Kentucky Nature Preserves Commission and the Kentucky Department for Fish and Wildlife Resources;
 - (f) The direction of groundwater flow;
 - (g) Location of groundwater users; and
 - (h) Property boundaries where they occur on the map showing the adjacent land owner's name.
- (3) Graphics or engineering drawings shall be provided to show the following:
- (a) Proposed landfill site prior to development;
 - (b) Anticipated landfill units and phases;
 - (c) Environmental protection measures including liners, cap, groundwater monitoring, surface water monitoring, silt ponds, etc.;
 - (d) Geologic setting of the site; and
 - (e) Proposed site entrance.

Section 10. Ownership Information. The administrative application shall contain a showing of the past compliance record for both the applicant and any other individual or entity designated to own or operate the facility by submitting the following:

- (1) Organizational structure;
 - (a) If the applicant is a proprietorship, the applicant shall provide a detailed listing of:
 - 1. The proprietors and their respective interests, whether ownership or otherwise; and
 - 2. Any partnerships (general or limited), joint venture, or corporation in which the applicant holds a twenty-five (25) percent or more interest (whether ownership or otherwise);
 - (b) If the applicant is a partnership, either general or limited, the applicant shall provide a detailed listing of:
 - 1. Each of the partners and their respective interests, whether ownership or otherwise;
 - 2. Any corporation, joint venture, partnership (general or limited), or proprietorship in which any of the constituent partners of the applicant holds twenty-five (25) percent or more interest (whether ownership or otherwise); and
 - 3. Any corporation, joint venture, proprietorship, or partnership (general or limited) which holds a twenty-five (25) percent or more interest (whether ownership or otherwise) in any of the nonindividual constituent partners comprising the applicant;
 - (c) If the applicant is a corporation, the applicant shall provide a detailed listing of:
 - 1. The officers, directors, and major stockholders;
 - 2. Any corporation of which the applicant is either a subsidiary or which holds twenty-five (25) percent or more interest (either in stock or assets) in the applicant;
 - 3. Any corporations which are either subsidiaries of the applicant or in which the applicant holds a twenty-five (25) percent or more interest (either in stock or assets); and
 - 4. Any proprietorship, partnership (general or limited), or joint venture in which the applicant holds a twenty-five (25) percent or more interest, whether ownership or otherwise;
 - (d) If the applicant is a joint venture, a detailed listing of:
 - 1. All other joint ventures, and the respective interests (whether ownership or otherwise) of each;

and

2. Any proprietorship, partnership (general or limited), joint venture or corporation in which the applicant holds a twenty-five (25) percent or more interest (whether ownership or otherwise); and

(2) For every individual or other entity listed in subsection (1) of this section, a detailed listing of violations of federal or state laws, rules or administrative regulation, whether judicial or administrative, where proceedings are completed and have resulted in criminal convictions or civil or administrative fines as much as or more than \$1000. The status of any pending action, whether judicial or administrative, shall also be submitted. This subsection shall apply to the requirements of the Clean Air Act (1955) as amended through December 1987, the Clean Water Act (1977) as amended through November 1988, the Surface Mine Reclamation Act (1977) as amended through July 1987, the Resource Conservation and Recovery Act (1976) as amended through November 1988, the Occupational Safety and Health Act (1970) as amended through November 1984, KRS Chapter 224, KRS Chapter 350 and KRS Chapter 352; and

(3) For each and every individual or other entity listed in subsection (1) of this section, a current financial statement prepared by a certified public accountant. (16 Ky.R. 1759; 2199; 2361; eff. 5-8-1990; Crt eff. 10-9-2018.)